INTERNATIONAL SEARCH REPORT

Inter : Application No PCT/IB2004/051164

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G05B19/19 G11B7/085 G11B7/09

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7-605B-611B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, COMPENDEX, INSPEC, IBM-TDB

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of t	he relevant passages	Relevant to claim No.
x	YAMAGUCHI T ET AL: "Recent contechnologies for fast and precessors of hard disk drives" ADVANCED MOTION CONTROL, 2000. PROCEEDINGS. 6TH INTERNATIONAL MARCH 30 - APRIL 1, 2000, PISCUSA,IEEE, 30 March 2000 (2000-pages 69-73, XP010507953 ISBN: 0-7803-5976-3	. WORKSHOP ON CATAWAY, NJ,	1,8-17, 24-32
Υ	* section: "5. Recent Technolo Smooth Settling" *	ogies for	2-7, 18-23
Υ	EP 0 387 224 A (INTERNATIONAL MACHINES CORPORATION) 12 September 1990 (1990-09-12) the whole document		2-7, 18-23
X Fur	ther documents are listed in the continuation of box C.	Y Patent family members are listed	In annex.
"A" docum consi "E" earlier filling "L" docum which citatic "O" docum other "P" docum	ategories of cited documents : nent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international date ent which may throw doubts on priority claim(s) or is cited to establish the publication date of another on or other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means the published prior to the international filing date but than the priority date claimed	"T" later document published after the Into or priority date and not in conflict with cited to understand the principle or the invention "X" document of particular relevance; the cannot be considered novel or cannot involve an inventive step when the description of particular relevance; the cannot be considered to involve an indocument is combined with one or mants, such combination being obvict in the art. "&" document member of the same paten	claimed invention to be considered to occument is taken alone claimed invention iventive step when the ore other such docu- ous to a person skilled
	e actual completion of the international search 28 April 2005	Date of mailing of the international se 13/05/2005	arch report
	mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	Authorized officer Gardella, S	

INTERNATIONAL SEARCH REPORT

tinte at Application No PCT/IB2004/051164

		PC1/1B2004/051164							
C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT									
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.							
X	YAMAGUCHI T ET AL: "IMPROVEMENT OF SETTLING RESPONSE OF DISK HEAD POSITIONING SERVO USING MODE SWITCHING CONTROL WITH INITIAL VALUE COMPENSATION" IEEE TRANSACTIONS ON MAGNETICS, IEEE INC. NEW YORK, US, vol. 32, no. 3, May 1996 (1996-05), pages 1767-1772, XPO00657882 ISSN: 0018-9464 the whole document	1,8-12, 16,17, 24-28,32							
A	US 2002/171967 A1 (SZITA GABOR) 21 November 2002 (2002-11-21)	1,2,13, 14, 16-18, 29,30,32							
	the whole document								
Α	US 3 696 354 A (GASTON ALBERT PALOMBO ET AL) 3 October 1972 (1972-10-03) the whole document	1,17							

INTERNATIONAL SEARCH REPORT

information on patent family members

Inten Application No
PCT/IB2004/051164

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0387224	A	12-09-1990	US DE DE EP JP	5090002 A 69020926 D1 69020926 T2 0387224 A2 2273810 A	18-02-1992 24-08-1995 14-03-1996 12-09-1990 08-11-1990
US 2002171967	A1	21-11-2002	NONE	— — — — — — — — — — — — — — — — — — —	
US 3696354	Α	03-10-1972	NONE		